

DOCKET NO.

12-107

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Jason E. Rademacher

D 202.776.2370 E jrademacher@dowlohnesh.com

February 1, 2013

FILED/AC

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

FILED/ACCEPTED FEB 1 11

FEB 1 2013

Federal Communication  
Office of the SecretaryFederal Communications Commission  
Office of the Secretary

Re: Notice of Ex Parte Communication  
The Weather Channel  
MB Docket No. 12-107

Dear Ms. Dortch:

The Weather Channel, LLC ("TWC") is submitting this letter to follow up on points discussed in the January 14, 2013 meeting between TWC representatives and FCC staff regarding the above-referenced docket.<sup>1</sup>

As described in TWC's comments in this proceeding and as further described in our January 14, 2013, meeting, TWC faces two principal challenges in meeting some of the accessibility standards discussed in the *NPRM*. First, the weather warnings and advisories that TWC airs as visual crawls during regularly scheduled programming cannot practically be provided verbatim aurally – i.e., "see it/say it" -- due to hardware limitations and the content of the messages themselves. Second, because any video description solution TWC implements will require cooperation from MVPDs nationwide, it is difficult to estimate when TWC will be capable of complying with any FCC rules that are issued in this proceeding. The attachments illustrate these difficulties.

### Difficulties With Verbatim Aural Presentation of Text Alerts and Advisories

An FCC requirement of "see it/say it" for all emergency weather advisories aired by TWC would pose two significant challenges for TWC. First, TWC's Weather STARS, the hardware used to distribute TWC's local weather warnings, currently lack the capability of generating aural vocalizations of TWC's visual crawl alerts on a secondary audio programming channel ("SAP"). TWC's most advanced Weather STARS have limited aural vocalization capabilities, but none currently in use would permit adoption of an SAP solution. If the Commission were to require SAP capability, nearly all of TWC's Weather STARS would need to be upgraded or replaced, a process that would cost approximately \$14 million and potentially take years. For these reasons, TWC's current hardware would require TWC to implement a "see it/say it" requirement on its primary audio stream.

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<sup>1</sup> See Letter from David J. Wittenstein, Counsel for The Weather Channel to Marlene H. Dortch, Secretary, FCC, MB Docket No. 12-107, filed Jan. 16, 2013.

If a primary audio channel solution is employed, however, requiring TWC to provide verbatim “see it/say it” vocalizations of all alerts would lead to the complete disruption of TWC programming – often for hours at a time -- during many alerts. The Weather STARs system is programmed to automatically disseminate certain National Weather Service (“NWS”) severe weather alert and warning issued for the area in which a Weather STAR is deployed.<sup>2</sup> During these alerts and advisories, the Weather STARs will continue crawling these NWS messages for the duration of the emergency, which can last for several hours at a time. Crawling messages back-to-back in this fashion improves public awareness and safety because it allows TWC to inform viewers who might tune in at any time during the emergency. If TWC were required to provide verbatim vocalizations of these messages whenever they appear as crawls, TWC’s main programming could be interrupted for hours at a time, potentially interfering with actual live coverage of the emergency at hand.

To illustrate this problem, TWC has attached materials related to a January 13, 2013 NWS flash flood warning for Morgan, Limestone, and Madison Counties in Alabama. The warning aired a crawl continuously for two hours, and NWS issued three separate bulletins providing updates as the emergency progressed. Exhibit 1 contains print-outs of the NWS bulletins that were issued for this alert. Exhibit 2, File 1, includes an audio file demonstrating the two-hours of vocalization that would have been required for viewers in Morgan County, Alabama if TWC were operating under a verbatim “see it/say it” requirement.<sup>3</sup> If aired on TWC’s primary audio channel, this vocalization would have overridden TWC programming for the entire period of the emergency. Such programming interruptions would occur during every weather emergency in communities around the country every single day, making TWC’s programming unpredictable and ineffective.

Moreover, in some cases, these vocalizations likely would interfere with programming *directly pertaining to the weather emergency that is the subject of the NWS alert*. For example, Exhibit 3 contains print outs of a single lengthy NWS alert regarding Hurricane Irene on

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<sup>2</sup> The NWS issues approximately 25,000 severe thunderstorm and tornado alerts and warnings each year. That does not include flash flood, winter storm-related alerts and warnings, all of which TWC also passes through to viewers.

<sup>3</sup> As indicated in both Exhibit 1 and Exhibit 2, File 1, three separate alerts were sequentially issued by NWS. TWC classifies flash flood, tornado, severe thunderstorm, and extreme wind bulletins as “take action now” warnings. Such warnings are transmitted to viewers in the affected areas continuously for a full hour. If subsequent bulletins are issued as updates, TWC adds those bulletins to the crawl. For the Morgan County flash flood alert, the first bulletin was issued at 4:30 PM CST and aired back-to-back for nearly 30 minutes. The second bulletin was issued at 5:07 PM CST while the first bulletin was still in effect. For the next 30 minutes, these two bulletins alternated back-to-back. The third bulletin was issued at 5:36 PM CST, shortly after the first bulletin expired. For the next 30 minutes, the second and third bulletins rotated back-to-back. Then the second bulletin expired and for the final 30 minutes, the third bulletin crawled back-to-back.

August 27, 2011.<sup>4</sup> As demonstrated in Exhibit 2, File 2, a verbatim vocalization of this alert would take more than four minutes to recite, and such bulletins would have been provided frequently throughout the hurricane crisis over a period of several days in many areas.<sup>5</sup> Of course, for large-scale weather events like hurricanes, TWC typically airs special national programming covering the emergency. If TWC had been required to provide verbatim vocalization of every NWS bulletin crawling across the screen, viewers in the areas affected by Hurricane Irene would have missed TWC's national coverage. Because this programming would likely provide information critical to the life and safety of viewers in the affected areas, verbatim renderings of NWS messages likely would have had the effect of making viewers less safe and less prepared for the disaster.

To ensure that all viewers have access to emergency information, TWC's most recent Weather STAR upgrade incorporates the capability of providing a brief vocalization that gives viewers a brief aural alert for each NWS bulletin transmitted by TWC for the geographic area covered by the alert. In the case of the Alabama flash flood warning described above, upon the issuance of the NWS alert and commencement of the crawl, viewers in affected areas would have heard a single warning tone followed by: "A flash flood warning has been issued for our area." This tone and warning would have been repeated aurally each time an NWS bulletin began to scroll; in the case of the Alabama flash flood warning, approximately every 90 seconds for the duration of the alert.<sup>6</sup> For hurricane warnings, viewers in affected areas would hear two warning tones followed by the vocalization "A hurricane warning has been issued for our area."<sup>7</sup> With sufficient time for implementation – and a significant investment by TWC -- this capability could be rolled out to all of TWC's MVPD partners to ensure that the visually impaired receive an aural warning every time a textual warning appears on screen. It may be feasible to expand these vocalizations somewhat, although, as described above, a verbatim aural rendering of every word of every alert TWC carries likely would not serve the needs or interests of TWC's viewers.

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<sup>4</sup> The yellow highlighted portion of Exhibit 3 is the text that actually aired on TWC in the affected areas. As a result of certain coding embedded in the NWS alert, TWC's Weather STARs are able to discard the general introductory portion of the bulletin and the portion at the end that pertains only to ships at sea.

<sup>5</sup> During national weather events like hurricanes, which TWC's regular national programming also typically covers in depth, each new NWS bulletin is crawled for ten minutes, and then discontinued for ten minutes. This pattern repeats for the hour following release of the warning. Distributing NWS warnings in this manner permits viewers to receive both the national news and local alerts for the weather emergency.

<sup>6</sup> Exhibit 2, File 3 is an audio recording of the vocalization that residents of Morgan County Alabama would have heard during the January 13, 2013 flash flood warning.

<sup>7</sup> Exhibit 2, File 4 is an audio recording of the standard hurricane warning vocalization.

**TWC's Implementation of Any Change in FCC Requirements Will Require Significant Cooperation from TWC's MVPD Partners**

As explained in TWC's comments and in the January 14, 2013 meeting with FCC staff, TWC's Weather STARs system depends heavily on deployment of individual Weather STARs in cable headends and telco video facilities throughout the country, as well as cooperation from satellite video providers. The system has the capability of providing hyper-local weather information to very small areas. For example, Exhibit 4 is a transcription of the portion of the Hurricane Irene alert that aired in Currituck County, North Carolina on January 27, 2011. Simultaneously, different and relevant portions of the bulletin were running in other areas affected by the storm, including Norfolk, Ocean City, Gloucester County and others. Similarly, Exhibit 5 includes three screen shots showing separate flash flood warnings that aired in eastern Morgan County, Alabama, northwestern Morgan County, and southern Morgan County, respectively.

This level of localization is possible only if the MVPDs actively work with TWC to implement and maintain a robust installation of Weather STAR equipment. TWC's satellite picks up and transmits all NWS bulletins issued nationwide. Each Weather STAR is programmed to air only NWS messages that are relevant to the geographic area served by the facility at which the device is located. For example, in Exhibit 4, the Weather Star located in the cable headend serving Currituck County, North Carolina was able to use the header information provided by NWS to identify the Hurricane Irene warning as geographically relevant to Currituck County. That same Weather STAR device would not have aired the flash flood warnings for Morgan County, Alabama. Because each Weather STAR is programmed to catch alerts for its geographic area, the more STARs that are placed in different locations, the greater the localization viewers in the surrounding communities enjoy.

This high degree of localization depends on whether cable and telco partners deploy Weather STARs broadly in their individual headend and other facilities around the country. If a single Weather STAR were to serve a large geographic area – say an entire state – then all viewers in that state would receive all NWS bulletins relevant to that state, even if the warning is for a flash flood danger that is hundreds of miles away from some viewers. Such messages are useless to viewers outside the affected area and, if the new requirements discussed above are adopted, would substantial TWC programming interruptions for weather warnings that have no impact on them.

To achieve maximum localization, TWC works directly with video providers to ensure that as many Weather STARs as reasonably necessary are placed in as many MVPD video distribution facilities as possible. As TWC explained in the January 14, 2013 meeting, however, due to cable headend consolidation and the need for TWC to negotiate facilities access to permit installation of Weather STARs at cable headends, deployment of new devices is often an arduous

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and time-consuming process.<sup>8</sup> In addition, satellite providers have been reluctant to provide TWC with access to software API necessary for localizing alerts sent to satellite customers, which hampers TWC's ability to provide hyper-local alerts to satellite customers.

In implementing any new FCC rules regarding aural presentation of emergency alerts, TWC will need the cooperation of its MVPD partners and the deployment time for any solution will need to take into account TWC's need for access to MVPDs' premises and, in the case of satellite providers, access to software API. In view of the critical life-saving benefits of localized alerts, the FCC should strongly encourage MVPDs to cooperate with TWC's localized deployment of Weather STARs devices that will deliver the most geographically relevant local weather emergency alerts to as many households as possible.

For these reasons, TWC renews its request for (1) flexibility to implement an aural alert capability that serves the needs of the visually impaired without unduly disrupting TWC's primary programming; (2) adequate time to deploy a solution that meets the needs of the visually impaired with due consideration of the challenges TWC faces in deploying any solution to thousands of individual locations nationwide; and (3) FCC encouragement of cooperation from TWC's partner MVPDs.

Pursuant to Section 1.1206(b)(2) of the Commission's Rules, 47 C.F. R. Section 1.1206(b)(2), an original and two copies of this letter are being filed with the Secretary's Office and a copy is being provided to the office of each Commission participant in the meeting.

Please inform the undersigned if you have any questions regarding this matter.

Sincerely,



Jason E. Rademacher  
Counsel for The Weather Channel

Attachments

cc:

Michelle Carey  
Steven Broeckaert  
Diana Sokolow  
Jeffrey Neumann

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<sup>8</sup> In some instances, MVPDs have simply chosen to remove some Weather STAR devices from their distribution facilities for reasons not fully understood by TWC. This is particularly peculiar since TWC assumes \$5,900 of the \$6,000 cost of a Weather STAR device.

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Maria Mullarky  
Brenda Villanueva  
Karen Pelz Strauss  
Rosaline Crawford  
Eliot Greenwald

# **EXHIBIT**

**1**

## **NWS BULLETINS FOR JANUARY 13, 2013 FLASH FLOOD ALERT FOR MORGAN AND LIMESTONE COUNTIES, ALABAMA**



BULLETIN - EAS ACTIVATION REQUESTED  
FLASH FLOOD WARNING  
NATIONAL WEATHER SERVICE HUNTSVILLE AL  
438 PM CST SUN JAN 13 2013

THE NATIONAL WEATHER SERVICE IN HUNTSVILLE HAS ISSUED A

\* FLASH FLOOD WARNING FOR...  
NORTHWESTERN MORGAN COUNTY IN NORTH CENTRAL ALABAMA...  
SOUTHEASTERN LIMESTONE COUNTY IN NORTH CENTRAL ALABAMA...

\* UNTIL 1030 PM CST

\* AT 435 PM CST...TRAINED WEATHER SPOTTERS REPORTED HEAVY RAIN AND  
SEVERAL INTERSECTIONS COVERED WATER IN SOUTHEASTERN PORTIONS OF  
DECATUR. ONE INCH OF RAIN QUICKLY FELL IN THIS AREA OVER THE LAST  
45 MINUTES TO AN HOUR...WITH ADDITIONAL RAINFALL AMOUNTS OF AT  
LEAST ANOTHER INCH EXPECTED BY 7 PM CST THIS EVENING.

\* SOME LOCATIONS THAT WILL EXPERIENCE FLOODING INCLUDE...  
DECATUR...HARTSELLE...TRINITY...PRICEVILLE...FLINT CITY AND  
MOORESVILLE.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

EXCESSIVE RUNOFF FROM HEAVY RAINFALL WILL CAUSE FLOODING OF SMALL  
CREEKS AND STREAMS...URBAN AREAS...HIGHWAYS...STREETS AND  
UNDERPASSES AS WELL AS OTHER DRAINAGE AREAS AND LOW LYING SPOTS.

BE ESPECIALLY CAUTIOUS AT NIGHT WHEN IT IS HARDER TO RECOGNIZE THE  
DANGERS OF FLOODING. IF FLASH FLOODING IS OBSERVED ACT QUICKLY. MOVE  
UP TO HIGHER GROUND TO ESCAPE FLOOD WATERS. DO NOT STAY IN AREAS  
SUBJECT TO FLOODING WHEN WATER BEGINS RISING.

&&

BULLETIN - EAS ACTIVATION REQUESTED  
FLASH FLOOD WARNING  
NATIONAL WEATHER SERVICE HUNTSVILLE AL  
507 PM CST SUN JAN 13 2013

THE NATIONAL WEATHER SERVICE IN HUNTSVILLE HAS ISSUED A

- \* FLASH FLOOD WARNING FOR...  
EASTERN MORGAN COUNTY IN NORTH CENTRAL ALABAMA...  
LIMESTONE COUNTY IN NORTH CENTRAL ALABAMA...  
NORTHWESTERN MADISON COUNTY IN NORTH CENTRAL ALABAMA...
- \* UNTIL 1100 PM CST
- \* AT 505 PM CST...TRAINED WEATHER SPOTTERS REPORTED HEAVY RAIN AND  
SEVERAL ROADWAYS COVERED IN WATER NORTHWEST OF ATHENS. CANNON ROAD  
HAD SEVERAL INCHES OF WATER FLOWING OVER IT AS A LINE OF VERY  
HEAVY RAINFALL MOVED ACROSS THE AREA. ONE INCH OF RAIN FELL  
QUICKLY IN THIS AREA CAUSING FLASH FLOODING...AND THIS TREND WILL  
CONTINUE EASTWARD INTO MADISON COUNTY AND NORTHERN MORGAN COUNTY  
THROUGH 7 PM CST THIS EVENING. AT LEAST ANOTHER INCH OF RAINFALL  
IS POSSIBLE THROUGH MIDNIGHT TONIGHT.
- \* SOME LOCATIONS THAT WILL EXPERIENCE FLOODING INCLUDE...  
HUNTSVILLE...MADISON...ATHENS...MOORES MILL...MERIDIANVILLE...  
REDSTONE ARSENAL...HAZEL GREEN...HARVEST...ARDMORE...ELKMONT...  
TRIANA AND SOMERVILLE.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

EXCESSIVE RUNOFF FROM HEAVY RAINFALL WILL CAUSE FLOODING OF SMALL  
CREEKS AND STREAMS...URBAN AREAS...HIGHWAYS...STREETS AND  
UNDERPASSES AS WELL AS OTHER DRAINAGE AREAS AND LOW LYING SPOTS.

BE ESPECIALLY CAUTIOUS AT NIGHT WHEN IT IS HARDER TO RECOGNIZE THE  
DANGERS OF FLOODING. IF FLASH FLOODING IS OBSERVED ACT QUICKLY. MOVE  
UP TO HIGHER GROUND TO ESCAPE FLOOD WATERS. DO NOT STAY IN AREAS  
SUBJECT TO FLOODING WHEN WATER BEGINS RISING.

&&

BULLETIN - EAS ACTIVATION REQUESTED  
FLASH FLOOD WARNING  
NATIONAL WEATHER SERVICE HUNTSVILLE AL  
536 PM CST SUN JAN 13 2013

THE NATIONAL WEATHER SERVICE IN HUNTSVILLE HAS ISSUED A

- \* FLASH FLOOD WARNING FOR...  
SOUTHERN MORGAN COUNTY IN NORTH CENTRAL ALABAMA...  
CULLMAN COUNTY IN NORTH CENTRAL ALABAMA...
- \* UNTIL 1130 PM CST
- \* AT 530 PM CST...DOPPLER RADAR INDICATED HEAVY RAIN ACROSS CULLMAN COUNTY...WITH UPWARDS OF ONE INCH OF RAIN IN LESS THAN 45 MINUTES. THIS WILL LEAD TO EXCESSIVE RUNOFF...CAUSING FLASH FLOODING THROUGHOUT THE COUNTY. URBAN AND LOW-LYING AREAS WILL BE MOST SUSCEPTIBLE TO HAVING FLOODING ISSUES...AND AN ADDITIONAL INCH OR MORE OF RAINFALL IS POSSIBLE THROUGH MIDNIGHT TONIGHT.
- \* SOME LOCATIONS THAT WILL EXPERIENCE FLOODING INCLUDE...  
CULLMAN...HANCEVILLE...GOOD HOPE...FALKVILLE...BAILEYTON...HOLLY POND...GARDEN CITY...FAIRVIEW...EVA...SOUTH VINEMONT...COLONY AND WEST POINT.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

EXCESSIVE RUNOFF FROM HEAVY RAINFALL WILL CAUSE FLOODING OF SMALL CREEKS AND STREAMS...URBAN AREAS...HIGHWAYS...STREETS AND UNDERPASSES AS WELL AS OTHER DRAINAGE AREAS AND LOW LYING SPOTS.

BE ESPECIALLY CAUTIOUS AT NIGHT WHEN IT IS HARDER TO RECOGNIZE THE DANGERS OF FLOODING. IF FLASH FLOODING IS OBSERVED ACT QUICKLY. MOVE UP TO HIGHER GROUND TO ESCAPE FLOOD WATERS. DO NOT STAY IN AREAS SUBJECT TO FLOODING WHEN WATER BEGINS RISING.

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# **EXHIBIT**

**2**

## **VOCALIZED WEATHER EMERGENCY ALERTS FROM NWS**

**(CD ATTACHED)**

# **EXHIBIT**

**3**

## **NWS BULLETINS FOR HURRICANE IRENE FROM AUGUST 27, 2011**

999

WTUS81 KAKQ 270412

HLSAKQ

URGENT - IMMEDIATE BROADCAST REQUESTED  
HURRICANE IRENE LOCAL STATEMENT  
NATIONAL WEATHER SERVICE WAKEFIELD VA  
1212 AM EDT SAT AUG 27 2011

...IRENE MOVING NORTH-NORTHEASTWARD TOWARD SOUTHEASTERN NORTH  
CAROLINA...TROPICAL STORM CONDITIONS LASHING THE CAROLINA COAST...

.NEW INFORMATION...

UPDATED HURRICANE IRENE INFORMATION FROM THE 11 PM ADVISORY. ADDED  
POTENTIAL FOR TORNADOES TO OVERVIEW SECTION FOR SOUTHEASTERN  
VIRGINIA AND NORTHEASTERN NORTH CAROLINA.

.AREAS AFFECTED...

THIS LOCAL STATEMENT PROVIDES IMPORTANT INFORMATION AND  
RECOMMENDED ACTIONS FOR PEOPLE AND MARINE INTERESTS IN SELECT  
LOCATIONS AND COASTAL WATER LEGS OF CENTRAL AND EASTERN  
VIRGINIA...NORTHEAST NORTH CAROLINA...AND THE LOWER EASTERN  
SHORE...INCLUDING THE VIRGINIA PORTION OF THE CHESAPEAKE BAY...  
CURRITUCK SOUND...AND ADJACENT ATLANTIC COASTAL WATERS.

.WATCHES/WARNINGS...

A HURRICANE WARNING CONTINUES FOR THE FOLLOWING LOCATIONS...  
DORCHESTER...WICOMICO...SOMERSET...INLAND WORCESTER...MARYLAND  
BEACHES...HERTFORD...GATES...PASQUOTANK...CAMDEN...INLAND  
CURRITUCK...BERTIE...CHOWAN...PERQUIMANS...OUTER BANKS  
CURRITUCK...NORTHUMBERLAND...LANCASTER...GLOUCESTER...MIDDLESEX...  
MATHEWS...YORK...ISLE OF WIGHT...NEWPORT NEWS/HAMPTON...  
NORFOLK/PORTSMOUTH...SUFFOLK...CHESAPEAKE...VIRGINIA BEACH...  
ACCOMACK AND NORTHAMPTON VA.

FOR MARINE INTERESTS...A HURRICANE WARNING CONTINUES FOR  
PORTIONS OF VIRGINIA PORTION OF THE CHESAPEAKE BAY...CURRITUCK  
SOUND...AND ADJACENT ATLANTIC COASTAL WATERS.

A TROPICAL STORM WARNING CONTINUES FOR THE FOLLOWING LOCATIONS...  
NORTHAMPTON NC...HANOVER...CAROLINE...CHESTERFIELD...HENRICO...  
KING WILLIAM...KING AND QUEEN...ESSEX...WESTMORELAND...RICHMOND...  
BRUNSWICK...DINWIDDIE...PRINCE GEORGE...CHARLES CITY...NEW KENT...  
GREENSVILLE...SUSSEX...SURRY...JAMES CITY AND SOUTHAMPTON.

ALTHOUGH TROPICAL CYCLONE WATCHES OR WARNINGS ARE NOT IN EFFECT  
FOR THE FOLLOWING LOCATIONS...FLUVANNA...LOUISA...PRINCE EDWARD...  
CUMBERLAND...GOOCHLAND...MECKLENBURG...LUNENBURG...NOTTOWAY...  
AMELIA AND POWHATAN...POSSIBLE IMPACTS FROM RELATED HAZARDS ARE  
STILL A CONCERN.

A FLOOD WATCH IS IN EFFECT FOR PORTIONS OF CENTRAL AND EASTERN  
VIRGINIA...NORTHEAST NORTH CAROLINA...AND THE LOWER EASTERN  
SHORE. PLEASE LISTEN CLOSELY FOR ANY FLOOD WARNINGS THAT MIGHT BE  
IN EFFECT FOR YOUR AREA.

A STATE OF EMERGENCY REMAINS IN EFFECT FOR VIRGINIA...NORTH

CAROLINA...AND MARYLAND.

.STORM INFORMATION...

AT 11 PM EDT...THE CENTER OF HURRICANE IRENE WAS LOCATED NEAR LATITUDE 32.6N...LONGITUDE 76.9W. THIS WAS ABOUT 410 MILES SOUTH-SOUTHWEST OF OCEAN CITY MD...OR ABOUT 300 MILES SOUTH OF NORFOLK VA. STORM MOTION WAS NNE OR 20 DEGREES AT 13 MPH. STORM INTENSITY WAS 100 MPH.

.SITUATION OVERVIEW...

WHEN MAKING DECISIONS...DO NOT FOCUS ON THE EXACT FORECAST TRACK. DUE TO THE SIZE AND THE STRENGTH OF HURRICANE IRENE...SIGNIFICANT IMPACTS WILL OCCUR WELL AWAY FROM THE STORM CENTER. SIGNIFICANT STORM SURGE...DAMAGING WINDS AND INLAND FLOODING ARE EXPECTED AS IRENE AFFECTS THE AREA. TROPICAL STORM FORCE WINDS ARE EXPECTED TO BEGIN LATE TONIGHT...SPREADING NORTH INTO EARLY SATURDAY MORNING. HURRICANE FORCE WINDS ARE FORECAST TO BEGIN ACROSS THE SOUTHERN PORTIONS BY MIDDAY SATURDAY...SPREADING NORTH TO THE LOWER EASTERN SHORE BY EARLY SATURDAY EVENING.

A FLOOD WATCH IS IN EFFECT FOR NORTHEASTERN NORTH CAROLINA...THE LOWER EASTERN SHORE...AND MUCH OF CENTRAL AND EASTERN VIRGINIA. RAINFALL WILL INCREASE IN INTENSITY AS HURRICANE IRENE MOVES TOWARD THE COAST LATER TONIGHT. RAINFALL AMOUNTS OF 6 TO 12 INCHES WITH LOCALLY HIGHER AMOUNTS ARE EXPECTED. THE HEAVIEST RAINFALL IS EXPECTED TO OCCUR SOUTHEAST OF HIGHWAY 258 IN ACROSS SOUTHEASTERN VIRGINIA. PLEASE LISTEN FOR ANY FLOOD WARNINGS THAT MIGHT BE IN EFFECT FOR YOUR AREA.

ISOLATED TORNADOES ARE POSSIBLE LATE TONIGHT AND EARLY SATURDAY...MAINLY ACROSS EASTERN NORTH CAROLINA AND SOUTHERN HAMPTON ROADS. ANY TORNADOES THAT OCCUR WILL BE BRIEF AND VERY DIFFICULT TO SEE. PLEASE LISTEN FOR ANY TORNADO WARNINGS THAT MIGHT BE ISSUED FOR YOUR AREA.

.PRECAUTIONARY/PREPAREDNESS ACTIONS...  
PRECAUTIONARY/PREPAREDNESS ACTIONS...

NOW IS THE TIME TO RUSH TO COMPLETION PREPARATIONS FOR THE PROTECTION OF LIFE AND PROPERTY. EVACUATE IF DIRECTED TO DO SO BY LOCAL OFFICIALS...OR IF YOUR HOME IS VULNERABLE TO HIGH WINDS OR FLOODING.

FOR INTERESTS AT PORTS...DOCKS...AND MARINAS...URGENTLY COMPLETE PRESCRIBED PREPARATIONS ACCORDING TO YOUR EMERGENCY OPERATIONS PLAN FOR TROPICAL CYCLONES. IF YOU LIVE ON A BOAT...MAKE FINAL PREPARATIONS FOR SECURING YOUR CRAFT BEFORE LEAVING IT. BE SURE TO ACCOUNT FOR THE POSSIBLE CLOSURE OF BRIDGES AND CAUSEWAYS.

REGARDING ANY COASTAL WATERS UNDER A WARNING...SMALL CRAFT SHOULD REMAIN IN PORT AND WELL SECURED.

FOR ADDITIONAL PRECAUTIONARY AND PREPAREDNESS INFORMATION... PLEASE REFER TO THE DETAILED RECOMMENDATIONS RELATIVE TO YOUR LOCATION AS FURTHER DESCRIBED BY YOUR LOCAL NATIONAL WEATHER SERVICE OFFICE AND LOCAL EMERGENCY MANAGEMENT.

&&

.NEXT UPDATE...

THE NEXT LOCAL STATEMENT WILL BE ISSUED BY THE NATIONAL WEATHER SERVICE IN WAKEFIELD AROUND MIDNIGHT EDT...OR SOONER IF CONDITIONS WARRANT.

NCZ013>017-030>032-102-280415-  
/O.CON.KAKQ.HU.W.1009.000000T0000Z-000000T0000Z/  
HERTFORD-GATES-PASQUOTANK-CAMDEN-INLAND CURRITUCK-BERTIE-CHOWAN-  
PERQUIMANS-OUTER BANKS CURRITUCK-  
1212 AM EDT SAT AUG 27 2011

...HURRICANE WARNING REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...  
PRECAUTIONARY/PREPAREDNESS ACTIONS...

FOR CURRITUCK COUNTY...A MANDATORY EVACUATION ORDER IS IN EFFECT.  
FOR PERQUIMANS COUNTY...A VOLUNTARY EVACUATION OF LOW LYING AREAS  
IS ONGOING. A RED CROSS SHELTER HAS OPENED AT THE PERQUIMANS  
MIDDLE SCHOOL...AT 312 WEST MAIN STREET IN WINFALL.  
FOR CAMDEN COUNTY...A MANDATORY EVACUATION IS IN EFFECT FOR ALL  
LOW LYING AREAS IS ONGOING. FOR BERTIE COUNTY...3 SHELTERS HAVE OPENED IN  
WINDSOR...KEILFORD  
AND COLERAIN.  
IF EVACUATING...LEAVE AS SOON AS POSSIBLE. GUARD AGAINST BEING  
STUCK OUT ON ROADWAYS WHEN DANGEROUS WINDS AND HEAVY RAINS ARRIVE.  
AGAIN...DO NOT STAY IN A MOBILE OR MANUFACTURED HOME.  
REMEMBER...PETS ARE NOT ALLOWED IN MOST OFFICIAL SHELTERS...SO  
CHECK AHEAD WITH YOUR INTENDED SHELTER.

IF STAYING IN A HOME...TURN THE REFRIGERATOR TO MAXIMUM COLD AND  
KEEP IT CLOSED. TURN OFF PROPANE TANKS AND UNPLUG SMALL  
APPLIANCES. FILL THE BATHTUB WITH WATER IN CASE THE TAP WATER  
BECOMES UNAVAILABLE AFTER THE STORM. THIS IS FOR CLEANING AND  
FLUSHING PURPOSES. DO NOT DRINK IT.

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...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS...  
THE CHANCE FOR HURRICANE CONDITIONS AT THIS TIME IS UP TO  
39 PERCENT. ALSO...THE CHANCE FOR TROPICAL STORM CONDITIONS AT  
THIS TIME IS UP TO 99 PERCENT.

...STORM SURGE AND STORM TIDE...  
AS HURRICANE IRENE APPROACHES THE COAST...THERE IS AN INCREASING  
CHANCE FOR COMBINED STORM SURGE AND ASTRONOMICAL TIDE WATERS UP  
TO 5 FEET ABOVE MEAN SEA LEVEL WITHIN AREAS CLOSER TO THE COAST...  
RESULTING IN WORST CASE FLOOD INUNDATION OF 3 TO 5 FEET ABOVE  
GROUND LEVEL SOMEWHERE WITHIN THE SURGE ZONE.

THE LOCATIONS MOST LIKELY TO REALIZE THE GREATEST FLOODING  
INCLUDE COROLLA. LOCATIONS ALONG THE ALBEMARLE SOUNDING CAN  
EXPECT 2 TO 4 FEET. HOWEVER LESSER VALUES WILL OCCUR UP THE  
RIVERS. THE MOST LIKELY PERIOD OF IMPACT WILL BE SATURDAY  
AFTERNOON AND SATURDAY NIGHT.



THERE IS AN ELEVATED THREAT TO LIFE AND PROPERTY FROM COASTAL FLOODING. THE CONCERN IS FOR THE CHANCE OF MODERATE TO HIGH COASTAL FLOODING TO OCCUR IN AREAS WITHIN THE SURGE ZONE... RESULTING IN DAMAGING AND LIFE THREATENING INUNDATION. IF REALIZED...PEOPLE WITHIN THE THREATENED AREAS WHO FAILED TO HEED OFFICIAL EVACUATION ORDERS WILL HAVE NEEDLESSLY PLACED THEIR LIVES IN DANGER. THIS IS ESPECIALLY TRUE FOR THOSE STAYING BEHIND IN VULNERABLE LOCATIONS SUCH AS HOMES AND BUSINESSES NEAR THE SHORE...AND ONE STORY DWELLINGS IN FLOOD PRONE AREAS. SEVERAL ROADS IN FLOOD PRONE AREAS WILL LIKELY BE CLOSED.

...INLAND FLOODING...

A FLOOD WATCH IS IN EFFECT FOR THE ENTIRE AREA. 8 TO 12 INCHES OF STORM TOTAL RAINFALL IS EXPECTED ACROSS THE AREA WITH THE HIGHEST AMOUNTS CLOSER TO THE COAST. LISTEN FOR POSSIBLE FLOOD WARNINGS FOR YOUR LOCATION...AND BE READY TO ACT IF FLOODING RAINS OCCUR.

...WINDS...

AS HURRICANE IRENE APPROACHES...SUSTAINED TROPICAL STORM FORCE WINDS ARE EXPECTED TO BEGIN TONIGHT AFTER MIDNIGHT. MAXIMUM WINDS ARE FORECAST TO BE IN THE 50 TO 70 MPH RANGE WITH GUSTS TO 80 MPH.

DAMAGING WINDS ARE EXPECTED. POORLY ANCHORED MOBILE HOMES MAY BE DESTROYED...ALONG WITH THOSE OF OLD OR POOR CONSTRUCTION. SOME WELL ANCHORED MOBILE HOMES WILL HAVE SUBSTANTIAL DAMAGE TO ROOFS...WALLS...AND WINDOWS...AND COULD BECOME UNINHABITABLE. SOME HOMES OF FRAME CONSTRUCTION WILL SUSTAIN PARTIAL WALL AND ROOF FAILURE...AND POSSIBLY BLOWN OUT WINDOWS. LOOSE OUTDOOR ITEMS WILL BECOME PROJECTILES...CAUSING ADDITIONAL DAMAGE AND POSSIBLE INJURY. MANY AREAS WILL EXPERIENCE POWER OUTAGES WITH SOME DOWNED POWER POLES. NUMEROUS LARGE BRANCHES OF HEALTHY TREES WILL SNAP. SOME TREES WILL BE UPROOTED...ESPECIALLY WHERE THE GROUND IS SATURATED.

...COASTAL HAZARDS...

THERE WILL BE A HIGH RISK OF RIP CURRENTS ALONG AREA BEACHES TODAY AND SATURDAY. LARGE BREAKING WAVES...AND ROUGH SURF WILL ALSO BE A THREAT. DUE TO RIP CURRENTS AND VERY ROUGH SURF...BEACH GOERS ARE ENCOURAGED TO STAY OUT OF THE WATER.

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VAZ091-093>098-280415-  
/O.CON.KAQ.HU.W.1009.000000T0000Z-000000T0000Z/  
YORK-ISLE OF WIGHT-NEWPORT NEWS/HAMPTON-NORFOLK/PORTSMOUTH-  
SUFFOLK-CHESAPEAKE-VIRGINIA BEACH-  
1212 AM EDT SAT AUG 27 2011

...HURRICANE WARNING REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...  
PRECAUTIONARY/PREPAREDNESS ACTIONS...

FOR THE CITY OF NORFOLK...A MANDATORY EVACUATION IS IN EFFECT FOR LOW LYING AREAS. SIX SHELTERS HAVE OPENED ACROSS THE CITY. FOR THE CITY OF

HAMPTON...A MANDATORY EVACUATION IS IN EFFECT FOR SEVERAL LOW-LYING NEIGHBORHOODS. FOR THE CITY OF VIRGINIA BEACH...A MANDATORY EVACUATION IS IN EFFECT FOR SANDBRIDGE AND KNOTT'S ISLAND...AS WELL AS LOW LYING AREAS. SEVERAL SHELTERS ARE OPEN ACROSS THE CITY. FOR YORK COUNTY...A MANDATORY EVACUATION IS IN EFFECT FOR LOW LYING AREAS. TWO SHELTERS ARE OPEN ACROSS THE COUNTY. FOR THE CITY OF POQUOSON...A MANDATORY EVACUATION ORDER IS IN EFFECT. FOR THE CITY OF PORTSMOUTH...A MANDATORY EVACUATION ORDER IS IN EFFECT FOR SEVERAL COMMUNITIES WITHIN THE CITY. MAKE THE FINAL PREPARATIONS TO PROTECT LIFE AND PROPERTY. RUSH TO COMPLETION THE HARDENING OF YOUR HOME OR BUSINESS BY CLOSING SHUTTERS AND BRACING GARAGE DOORS.

IF EVACUATING...LEAVE AS SOON AS POSSIBLE. GUARD AGAINST BEING STUCK OUT ON ROADWAYS WHEN DANGEROUS WINDS AND HEAVY RAINS ARRIVE. AGAIN...DO NOT STAY IN A MOBILE OR MANUFACTURED HOME. REMEMBER...PETS ARE NOT ALLOWED IN MOST OFFICIAL SHELTERS...SO CHECK AHEAD WITH YOUR INTENDED SHELTER.

IF STAYING IN A HOME...TURN THE REFRIGERATOR TO MAXIMUM COLD AND KEEP IT CLOSED. TURN OFF PROPANE TANKS AND UNPLUG SMALL APPLIANCES. FILL THE BATHTUB WITH WATER IN CASE THE TAP WATER BECOMES UNAVAILABLE AFTER THE STORM. THIS IS FOR CLEANING AND FLUSHING PURPOSES. DO NOT DRINK IT.

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...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS... THE CHANCE FOR HURRICANE CONDITIONS AT THIS TIME IS UP TO 27 PERCENT. ALSO...THE CHANCE FOR TROPICAL STORM CONDITIONS AT THIS TIME IS UP TO 95 PERCENT.

...STORM SURGE AND STORM TIDE... AS HURRICANE IRENE APPROACHES THE COAST...THERE IS AN INCREASING CHANCE FOR COMBINED STORM SURGE AND ASTRONOMICAL TIDE WATERS UP TO 7 FEET ABOVE MEAN SEA LEVEL WITHIN AREAS CLOSER TO THE COAST... RESULTING IN WORST CASE FLOOD INUNDATION OF 3 TO 6 FEET ABOVE GROUND LEVEL SOMEWHERE WITHIN THE SURGE ZONE.

THE LOCATIONS MOST LIKELY TO REALIZE THE GREATEST FLOODING INCLUDE NORFOLK...VIRGINIA BEACH AND AREAS ADJACENT TO THE CHESAPEAKE BAY. THE MOST LIKELY PERIOD OF IMPACT WILL BE DURING THE TIME OF HIGH TIDE...SATURDAY EVENING.

THERE IS AN ELEVATED THREAT TO LIFE AND PROPERTY FROM COASTAL FLOODING...POTENTIALLY HAVING A LOW BUT NOTABLE IMPACT. THE CONCERN IS FOR THE CHANCE OF MINOR COASTAL FLOODING TO OCCUR IN AREAS WITHIN THE SURGE ZONE...RESULTING IN SHALLOW INUNDATION. IF REALIZED...PEOPLE WITHIN THE THREATENED AREAS WHO FAILED TO ACT ACCORDING TO THEIR PERSONAL DISASTER PLAN WILL HAVE NEEDLESSLY PLACED THEMSELVES AT SOME MEASURE OF RISK.

MANY HOMES AND BUSINESSES ALONG THE SHORELINE...OR IN FLOOD PRONE AREAS...WILL LIKELY EXPERIENCE SOME WATER ENTERING INSIDE...

ESPECIALLY FOR THOSE STRUCTURES NOT RAISED OR PROTECTED BY A SEAWALL. HIGHER WAVES AND POUNDING SURF WILL INCREASE THE LIKELIHOOD OF PROPERTY DAMAGE NEAR THE COAST...ESPECIALLY IN EXPOSED LOCATIONS. SOME CARS MAY TAKE ON WATER OR EVEN BECOME DISPLACED.

...INLAND FLOODING...

A FLOOD WATCH IS IN EFFECT FOR THE ENTIRE AREA. 8 TO 12 INCHES OF STORM TOTAL RAINFALL IS EXPECTED ACROSS THE AREA WITH THE HIGHEST AMOUNTS CLOSER TO THE COAST. LISTEN FOR POSSIBLE FLOOD WARNINGS FOR YOUR LOCATION...AND BE READY TO ACT IF FLOODING RAINS OCCUR.

...WINDS...

AS HURRICANE IRENE APPROACHES...SUSTAINED TROPICAL STORM FORCE WINDS ARE EXPECTED TO BEGIN EARLY SATURDAY MORNING. MAXIMUM WINDS ARE FORECAST TO BE IN THE 50 TO 70 MPH RANGE WITH GUSTS TO 80 MPH. THE STRONGEST WINDS WILL BE ALONG THE IMMEDIATE COAST.

DAMAGING WINDS ARE EXPECTED. POORLY ANCHORED MOBILE HOMES MAY BE DESTROYED...ALONG WITH THOSE OF OLD OR POOR CONSTRUCTION. SOME WELL ANCHORED MOBILE HOMES WILL HAVE SUBSTANTIAL DAMAGE TO ROOFS...WALLS...AND WINDOWS...AND COULD BECOME UNINHABITABLE. SOME HOMES OF FRAME CONSTRUCTION WILL SUSTAIN PARTIAL WALL AND ROOF FAILURE...AND POSSIBLY BLOWN OUT WINDOWS. LOOSE OUTDOOR ITEMS WILL BECOME PROJECTILES...CAUSING ADDITIONAL DAMAGE AND POSSIBLE INJURY. MANY AREAS WILL EXPERIENCE POWER OUTAGES WITH SOME DOWNED POWER POLES. NUMEROUS LARGE BRANCHES OF HEALTHY TREES WILL SNAP. SOME TREES WILL BE UPROOTED...ESPECIALLY WHERE THE GROUND IS SATURATED.

...COASTAL HAZARDS...

THERE WILL BE A HIGH RISK OF RIP CURRENTS ALONG AREA BEACHES TODAY AND SATURDAY. LARGE BREAKING WAVES...AND ROUGH SURF WILL ALSO BE A THREAT. DUE TO RIP CURRENTS AND VERY ROUGH SURF...BEACH GOERS ARE ENCOURAGED TO STAY OUT OF THE WATER.

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MDZ024-025-VAZ099-100-280415-  
/O.CON.KAKQ.HU.W.1009.000000T0000Z-000000T0000Z/  
INLAND WORCESTER-MARYLAND BEACHES-ACCOMACK-NORTHAMPTON VA-  
1212 AM EDT SAT AUG 27 2011

...HURRICANE WARNING REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...  
PRECAUTIONARY/PREPAREDNESS ACTIONS...

FOR OCEAN CITY...A MANDATORY EVACUATION ORDER IS IN EFFECT. ROUTE 90 EASTBOUND IS CLOSED TO MOTORISTS. FOR ACCOMACK COUNTY...A MANDATORY EVACUATION ORDER IS IN EFFECT  
FOR LOW LYING AND FLOOD PRONE AREAS. SHELTERS HAVE BEEN OPENED AT THE NANDUA MIDDLE SCHOOL IN ONLEY...AND AT THE ARCADIA MIDDLE SCHOOL IN OAK HALL.

FOR NORTHAMPTON COUNTY...A MANDATORY EVACUATION ORDER IS IN EFFECT FOR LOW LYING AND FLOOD PRONE AREAS. A SHELTER HAS BEEN

OPENED AT NORTHAMPTON HIGH SCHOOL IN EASTVILLE.

MAKE THE FINAL PREPARATIONS TO PROTECT LIFE AND PROPERTY. RUSH TO COMPLETION THE HARDENING OF YOUR HOME OR BUSINESS BY CLOSING SHUTTERS AND BRACING GARAGE DOORS.

IF EVACUATING...LEAVE AS SOON AS POSSIBLE. GUARD AGAINST BEING STUCK OUT ON ROADWAYS WHEN DANGEROUS WINDS AND HEAVY RAINS ARRIVE. AGAIN...DO NOT STAY IN A MOBILE OR MANUFACTURED HOME. REMEMBER...PETS ARE NOT ALLOWED IN MOST OFFICIAL SHELTERS...SO CHECK AHEAD WITH YOUR INTENDED SHELTER.

IF STAYING IN A HOME...TURN THE REFRIGERATOR TO MAXIMUM COLD AND KEEP IT CLOSED. TURN OFF PROPANE TANKS AND UNPLUG SMALL APPLIANCES. FILL THE BATHTUB WITH WATER IN CASE THE TAP WATER BECOMES UNAVAILABLE AFTER THE STORM. THIS IS FOR CLEANING AND FLUSHING PURPOSES. DO NOT DRINK IT.

&&

...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS...  
THE CHANCE FOR HURRICANE CONDITIONS AT THIS TIME IS 8 TO 18 PERCENT. ALSO...THE CHANCE FOR TROPICAL STORM CONDITIONS AT THIS TIME IS UP TO 86 PERCENT.

...WINDS...

AS HURRICANE IRENE APPROACHES...SUSTAINED TROPICAL STORM FORCE WINDS ARE EXPECTED TO BEGIN SATURDAY MORNING. MAXIMUM WINDS ARE FORECAST TO BE IN THE 50 TO 70 MPH RANGE WITH GUSTS TO 85 MPH. DAMAGING WINDS ARE EXPECTED. POORLY ANCHORED MOBILE HOMES MAY BE DESTROYED...ALONG WITH THOSE OF OLD OR POOR CONSTRUCTION. SOME WELL ANCHORED MOBILE HOMES WILL HAVE SUBSTANTIAL DAMAGE TO ROOFS...WALLS...AND WINDOWS...AND COULD BECOME UNINHABITABLE. SOME HOMES OF FRAME CONSTRUCTION WILL SUSTAIN PARTIAL WALL AND ROOF FAILURE...AND POSSIBLY BLOWN OUT WINDOWS. LOOSE OUTDOOR ITEMS WILL BECOME PROJECTILES...CAUSING ADDITIONAL DAMAGE AND POSSIBLE INJURY. MANY AREAS WILL EXPERIENCE POWER OUTAGES WITH SOME DOWNED POWER POLES. NUMEROUS LARGE BRANCHES OF HEALTHY TREES WILL SNAP. SOME TREES WILL BE UPROOTED...ESPECIALLY WHERE THE GROUND IS SATURATED.

...STORM SURGE AND STORM TIDE...

AS HURRICANE IRENE APPROACHES THE COAST...THERE IS AN INCREASING CHANCE FOR COMBINED STORM SURGE AND ASTRONOMICAL TIDE WATERS UP TO 6 FEET ABOVE MEAN SEA LEVEL WITHIN AREAS CLOSER TO THE COAST... RESULTING IN WORST CASE FLOOD INUNDATION OF 4 TO 6 FEET ABOVE GROUND LEVEL SOMEWHERE WITHIN THE SURGE ZONE.

THE LOCATIONS MOST LIKELY TO REALIZE THE GREATEST FLOODING INCLUDE OCEAN CITY AND WACHAPREAGUE AND AREAS ADJACENT TO THE CHESAPEAKE BAY. THE MOST LIKELY PERIOD OF IMPACT WILL BE DURING THE TIME OF HIGH TIDE...SATURDAY NIGHT.

THERE IS A SIGNIFICANT THREAT TO LIFE AND PROPERTY FROM COASTAL FLOODING...POTENTIALLY HAVING A MODERATE IMPACT. THE CONCERN IS FOR THE CHANCE OF MODERATE COASTAL FLOODING TO OCCUR IN AREAS WITHIN THE SURGE ZONE...RESULTING IN DAMAGING AND LIFE

THREATENING INUNDATION. IF REALIZED...PEOPLE WITHIN THE  
THREATENED AREAS WHO FAILED TO HEED OFFICIAL EVACUATION ORDERS  
WILL HAVE NEEDLESSLY PLACED THEIR LIVES IN DANGER. THIS IS  
ESPECIALLY TRUE FOR THOSE STAYING BEHIND IN VULNERABLE LOCATIONS  
SUCH AS HOMES AND BUSINESSES NEAR THE SHORE...AND ONE STORY  
DWELLINGS IN FLOOD PRONE AREAS.

...INLAND FLOODING...

A FLOOD WATCH IS IN EFFECT FOR THE ENTIRE AREA. 8 TO 12 INCHES  
OF STORM TOTAL RAINFALL IS EXPECTED ACROSS THE AREA. LISTEN FOR  
POSSIBLE FLOOD WARNINGS FOR YOUR LOCATION...AND BE READY TO ACT IF  
FLOODING RAINS OCCUR.

...COASTAL HAZARDS...

THERE WILL BE A HIGH RISK OF RIP CURRENTS ALONG AREA BEACHES  
TODAY AND SATURDAY. LARGE BREAKING WAVES...AND ROUGH SURF WILL  
ALSO BE A THREAT. DUE TO RIP CURRENTS AND VERY ROUGH SURF...BEACH  
GOERS ARE ENCOURAGED TO STAY OUT OF THE WATER.

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VAZ077-078-084>086-280415-  
/O.CON.KAKQ.HU.W.1009.000000T0000Z-000000T0000Z/  
NORTHUMBERLAND-LANCASTER-GLOUCESTER-MIDDLESEX-MATHEWS-  
1212 AM EDT SAT AUG 27 2011

...HURRICANE WARNING REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...  
PRECAUTIONARY/PREPAREDNESS ACTIONS...

FOR GLOUCESTER COUNTY...A MANDATORY EVACUATION OF LOW-LYING AREAS  
IS IN EFFECT. FOR MIDDLESEX COUNTY...A MANDATORY EVACUATION OF LOW-LYING  
AREAS  
IS IN EFFECT. FOR NORTHUMBERLAND COUNTY...A VOLUNTARY EVACUATION OF LOW-LYING  
AREAS IS IN EFFECT. RESIDENTS OF THE LEWISSETTA ROAD AREA ARE URGED  
TO EVACUATE...AND ARE ADVISED THAT COUNTY OFFICIAL WILL BE UNABLE  
TO REACH THEM IN THE EVENT OF AN EMERGENCY AFTER NOON SATURDAY. A  
SHELTER WILL OPEN AT 8 AM SATURDAY MORNING AT THE NORTHUMBERLAND  
HIGH SCHOOL. MAKE THE FINAL PREPARATIONS TO PROTECT LIFE AND PROPERTY. RUSH  
TO  
COMPLETION THE HARDENING OF YOUR HOME OR BUSINESS BY CLOSING  
SHUTTERS AND BRACING GARAGE DOORS.

IF EVACUATING...LEAVE AS SOON AS POSSIBLE. GUARD AGAINST BEING  
STUCK OUT ON ROADWAYS WHEN DANGEROUS WINDS AND HEAVY RAINS  
ARRIVE. AGAIN...DO NOT STAY IN A MOBILE OR MANUFACTURED HOME.  
REMEMBER...PETS ARE NOT ALLOWED IN MOST OFFICIAL SHELTERS...SO  
CHECK AHEAD WITH YOUR INTENDED SHELTER.

IF STAYING IN A HOME...TURN THE REFRIGERATOR TO MAXIMUM COLD AND  
KEEP IT CLOSED. TURN OFF PROPANE TANKS AND UNPLUG SMALL  
APPLIANCES. FILL THE BATHTUB WITH WATER IN CASE THE TAP WATER  
BECOMES UNAVAILABLE AFTER THE STORM. THIS IS FOR CLEANING AND  
FLUSHING PURPOSES. DO NOT DRINK IT.

&&

...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS...  
THE CHANCE FOR HURRICANE CONDITIONS AT THIS TIME IS LESS THAN OR  
EQUAL TO 8 PERCENT. ALSO...THE CHANCE FOR TROPICAL STORM  
CONDITIONS AT THIS TIME IS UP TO 80 PERCENT.

...STORM SURGE AND STORM TIDE...  
AS HURRICANE IRENE APPROACHES THE COAST...THERE IS AN INCREASING  
CHANCE FOR COMBINED STORM SURGE AND ASTRONOMICAL TIDE WATERS UP  
TO 5 FEET ABOVE MEAN SEA LEVEL WITHIN AREAS CLOSER TO THE COAST...  
RESULTING IN WORST CASE FLOOD INUNDATION OF 2 TO 4 FEET ABOVE  
GROUND LEVEL SOMEWHERE WITHIN THE SURGE ZONE.

THE LOCATIONS MOST LIKELY TO REALIZE THE GREATEST FLOODING  
INCLUDE MATHEWS AND GLOUCESTER. THE MOST LIKELY PERIOD OF IMPACT  
WILL BE DURING THE TIME OF HIGH TIDE SATURDAY NIGHT.

THERE IS A SIGNIFICANT THREAT TO LIFE AND PROPERTY FROM COASTAL  
FLOODING...POTENTIALLY HAVING A MODERATE IMPACT. THE CONCERN IS  
FOR THE CHANCE OF MODERATE COASTAL FLOODING TO OCCUR IN AREAS  
WITHIN THE SURGE ZONE...RESULTING IN DAMAGING AND LIFE  
THREATENING INUNDATION. IF REALIZED...PEOPLE WITHIN THE  
THREATENED AREAS WHO FAILED TO HEED OFFICIAL EVACUATION ORDERS  
WILL HAVE NEEDLESSLY PLACED THEIR LIVES IN DANGER. THIS IS  
ESPECIALLY TRUE FOR THOSE STAYING BEHIND IN VULNERABLE LOCATIONS  
SUCH AS HOMES AND BUSINESSES NEAR THE SHORE...AND ONE STORY  
DWELLINGS IN FLOOD PRONE AREAS.

...INLAND FLOODING...  
A FLOOD WATCH IS IN EFFECT FOR THE ENTIRE AREA. 8 TO 12 INCHES  
OF STORM TOTAL RAINFALL IS EXPECTED ACROSS THE AREA. LISTEN FOR  
POSSIBLE FLOOD WARNINGS FOR YOUR LOCATION...AND BE READY TO ACT IF  
FLOODING RAINS OCCUR.

...WINDS...  
AS HURRICANE IRENE APPROACHES...SUSTAINED TROPICAL STORM FORCE  
WINDS ARE EXPECTED TO BEGIN LATE SATURDAY MORNING. MAXIMUM WINDS  
ARE FORECAST TO BE IN THE 45 TO 65 MPH RANGE WITH GUSTS TO  
75 MPH.

DAMAGING WINDS ARE EXPECTED. POORLY ANCHORED MOBILE HOMES MAY BE  
DESTROYED...ALONG WITH THOSE OF OLD OR POOR CONSTRUCTION. SOME  
WELL ANCHORED MOBILE HOMES WILL HAVE SUBSTANTIAL DAMAGE TO  
ROOFS...WALLS...AND WINDOWS...AND COULD BECOME UNINHABITABLE.  
SOME HOMES OF FRAME CONSTRUCTION WILL SUSTAIN PARTIAL WALL AND  
ROOF FAILURE...AND POSSIBLY BLOWN OUT WINDOWS. LOOSE OUTDOOR  
ITEMS WILL BECOME PROJECTILES...CAUSING ADDITIONAL DAMAGE AND  
POSSIBLE INJURY. MANY AREAS WILL EXPERIENCE POWER OUTAGES WITH  
SOME DOWNED POWER POLES. NUMEROUS LARGE BRANCHES OF HEALTHY TREES  
WILL SNAP. SOME TREES WILL BE UPROOTED...ESPECIALLY WHERE THE  
GROUND IS SATURATED.

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MDZ021>023-280415-  
/O.CON.KAKQ.HU.W.1009.000000T0000Z-000000T0000Z/

DORCHESTER-WICOMICO-SOMERSET-  
1212 AM EDT SAT AUG 27 2011

...HURRICANE WARNING REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...  
PRECAUTIONARY/PREPAREDNESS ACTIONS...

MAKE THE FINAL PREPARATIONS TO PROTECT LIFE AND PROPERTY. RUSH TO COMPLETION THE HARDENING OF YOUR HOME OR BUSINESS BY CLOSING SHUTTERS AND BRACING GARAGE DOORS.

IF EVACUATING...LEAVE AS SOON AS POSSIBLE. GUARD AGAINST BEING STUCK OUT ON ROADWAYS WHEN DANGEROUS WINDS AND HEAVY RAINS ARRIVE. AGAIN...DO NOT STAY IN A MOBILE OR MANUFACTURED HOME. REMEMBER...PETS ARE NOT ALLOWED IN MOST OFFICIAL SHELTERS...SO CHECK AHEAD WITH YOUR INTENDED SHELTER.

IF STAYING IN A HOME...TURN THE REFRIGERATOR TO MAXIMUM COLD AND KEEP IT CLOSED. TURN OFF PROPANE TANKS AND UNPLUG SMALL APPLIANCES. FILL THE BATHTUB WITH WATER IN CASE THE TAP WATER BECOMES UNAVAILABLE AFTER THE STORM. THIS IS FOR CLEANING AND FLUSHING PURPOSES. DO NOT DRINK IT.

&&

...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS...  
THE CHANCE FOR HURRICANE CONDITIONS AT THIS TIME IS LESS THAN OR EQUAL TO 10 PERCENT. ALSO...THE CHANCE FOR TROPICAL STORM CONDITIONS AT THIS TIME IS UP TO 75 PERCENT.

...STORM SURGE AND STORM TIDE...  
AS HURRICANE IRENE APPROACHES THE COAST...THERE IS AN INCREASING CHANCE FOR COMBINED STORM SURGE AND ASTRONOMICAL TIDE WATERS UP TO 3 FEET ABOVE MEAN SEA LEVEL WITHIN AREAS CLOSER TO THE COAST... RESULTING IN WORST CASE FLOOD INUNDATION UP TO 2 FEET ABOVE GROUND LEVEL SOMEWHERE WITHIN THE SURGE ZONE.

THE LOCATIONS MOST LIKELY TO REALIZE THE GREATEST FLOODING INCLUDE CRISFIELD AND CAMBRIDGE. THE MOST LIKELY PERIOD OF IMPACT WILL BE DURING THE TIME OF HIGH TIDE LATE SATURDAY NIGHT AND SUNDAY MORNING.

THERE IS AN ELEVATED THREAT TO LIFE AND PROPERTY FROM COASTAL FLOODING...POTENTIALLY HAVING A NOTABLE IMPACT. THE CONCERN IS FOR THE CHANCE OF MINOR TO MODERATE COASTAL FLOODING TO OCCUR IN AREAS WITHIN THE SURGE ZONE...RESULTING IN SOME INUNDATION. IF REALIZED...PEOPLE WITHIN THE THREATENED AREAS WHO FAILED TO ACT ACCORDING TO THEIR PERSONAL DISASTER PLAN WILL HAVE NEEDLESSLY PLACED THEMSELVES AT SOME MEASURE OF RISK.

MANY HOMES AND BUSINESSES ALONG THE SHORELINE...OR IN FLOOD PRONE AREAS...WILL LIKELY EXPERIENCE SOME WATER ENTERING INSIDE... ESPECIALLY FOR THOSE STRUCTURES NOT RAISED OR PROTECTED BY A SEAWALL. HIGHER WAVES AND POUNDING SURF WILL INCREASE THE LIKELIHOOD OF PROPERTY DAMAGE NEAR THE COAST...ESPECIALLY IN EXPOSED LOCATIONS. SOME CARS MAY TAKE ON WATER OR EVEN BECOME

DISPLACED.

MODERATE BEACH EROSION WILL OCCUR...WHICH MAY BECOME SUBSTANTIAL IF CONDITIONS EXTEND THROUGH MULTIPLE HIGH TIDES. SEVERAL ROADS IN FLOOD PRONE AREAS WILL LIKELY BE CLOSED.

...INLAND FLOODING...

A FLOOD WATCH IS IN EFFECT FOR THE ENTIRE AREA. 8 TO 12 INCHES OF STORM TOTAL RAINFALL IS EXPECTED ACROSS THE AREA. LISTEN FOR POSSIBLE FLOOD WARNINGS FOR YOUR LOCATION...AND BE READY TO ACT IF FLOODING RAINS OCCUR.

...WINDS...

AS HURRICANE IRENE APPROACHES...SUSTAINED TROPICAL STORM FORCE WINDS ARE EXPECTED TO BEGIN LATE SATURDAY MORNING. MAXIMUM WINDS ARE FORECAST TO BE IN THE 50 TO 70 MPH RANGE WITH GUSTS TO 80 MPH.

DAMAGING WINDS ARE EXPECTED. POORLY ANCHORED MOBILE HOMES MAY BE DESTROYED...ALONG WITH THOSE OF OLD OR POOR CONSTRUCTION. SOME WELL ANCHORED MOBILE HOMES WILL HAVE SUBSTANTIAL DAMAGE TO ROOFS...WALLS...AND WINDOWS...AND COULD BECOME UNINHABITABLE. SOME HOMES OF FRAME CONSTRUCTION WILL SUSTAIN PARTIAL WALL AND ROOF FAILURE...AND POSSIBLY BLOWN OUT WINDOWS. LOOSE OUTDOOR ITEMS WILL BECOME PROJECTILES...CAUSING ADDITIONAL DAMAGE AND POSSIBLE INJURY. MANY AREAS WILL EXPERIENCE POWER OUTAGES WITH SOME DOWNED POWER POLES. NUMEROUS LARGE BRANCHES OF HEALTHY TREES WILL SNAP. SOME TREES WILL BE UPROOTED...ESPECIALLY WHERE THE GROUND IS SATURATED.

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NCZ012-VAZ063-064-070>076-079>083-087>090-092-280415-  
/O.CON.KAKQ.TR.W.1009.000000T0000Z-000000T0000Z/  
NORTHAMPTON NC-HANOVER-CAROLINE-CHESTERFIELD-HENRICO-KING WILLIAM-  
KING AND QUEEN-ESSEX-WESTMORELAND-RICHMOND-BRUNSWICK-DINWIDDIE-  
PRINCE GEORGE-CHARLES CITY-NEW KENT-GREENSVILLE-SUSSEX-SURRY-  
JAMES CITY-SOUTHAMPTON-  
1212 AM EDT SAT AUG 27 2011

...TROPICAL STORM WARNING REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...  
PRECAUTIONARY/PREPAREDNESS ACTIONS...

FINAL PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD BE COMPLETED BEFORE CONDITIONS DETERIORATE. THE ONSET OF GUSTY WINDS AND HEAVY RAINS CAN CAUSE OUTSIDE ACTIVITIES TO BECOME DANGEROUS. SECURE LOOSE OUTDOOR OBJECTS WHICH CAN BE BLOWN AROUND. IF YOU LIVE IN A MOBILE HOME...LEAVE IT FOR MORE SUBSTANTIAL SHELTER.

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...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS...  
THE CHANCE FOR HURRICANE CONDITIONS AT THIS TIME IS VERY SMALL. ALSO...THE CHANCE FOR TROPICAL STORM CONDITIONS AT THIS TIME IS UP TO 84 PERCENT.



...INLAND FLOODING...

A FLOOD WATCH IS IN EFFECT FOR PORTIONS OF THE AREA. SEE LATEST FORECAST FOR LATEST INFORMATION. LISTEN FOR POSSIBLE FLOOD WARNINGS FOR YOUR LOCATION...AND BE READY TO ACT IF FLOODING RAINS OCCUR. 4 TO 8 INCHES OF RAIN IS EXPECTED ACROSS THE AREA. LISTEN FOR POSSIBLE FLOOD WARNINGS FOR YOUR LOCATION...AND BE READY TO ACT IF FLOODING RAINS OCCUR.

...WINDS...

AS HURRICANE IRENE APPROACHES...SUSTAINED TROPICAL STORM FORCE WINDS ARE EXPECTED TO BEGIN LATE SATURDAY AFTERNOON. MAXIMUM WINDS ARE FORECAST TO BE IN THE 35 TO 45 MPH RANGE WITH GUSTS TO 50 MPH.

MINOR TO MODERATE DAMAGE IS LIKELY TO MANY MOBILE HOMES... ESPECIALLY THOSE THAT HAVE CANOPIES...AWNINGS...OR CARPORTS. POORLY CONSTRUCTED HOMES MAY SUSTAIN MINOR WALL DAMAGE AND PARTIAL ROOF REMOVAL. OTHER HOMES MAY HAVE MINOR ROOF AND SIDING DAMAGE. SOME LOOSE OUTDOOR ITEMS WILL BE TOSSED AROUND AND MAY CAUSE ADDITIONAL DAMAGE. A FEW POWER LINES WILL BE KNOCKED DOWN RESULTING IN SCATTERED POWER OUTAGES. SOME LARGE BRANCHES OF HEALTHY TREES WILL BE SNAPPED. MOST NEWLY PLANTED TREES AND SHRUBS WILL BE DAMAGED OR UPROOTED.

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ANZ633-650-652-654-656-658-280415-  
/O.CON.KAKQ.HU.W.1009.000000T0000Z-000000T0000Z/  
CURRITUCK SOUND-  
COASTAL WATERS FROM FENWICK ISLAND DE TO CHINCOTEAGUE VA OUT TO  
20 NM-  
COASTAL WATERS FROM CHINCOTEAGUE TO PARRAMORE ISLAND VA OUT TO  
20 NM-  
COASTAL WATERS FROM PARRAMORE ISLAND TO CAPE CHARLES LIGHT VA OUT  
TO 20 NM-  
COASTAL WATERS FROM CAPE CHARLES LIGHT VA TO NC VA BORDER OUT TO  
20 NM-  
COASTAL WATERS FROM NC VA BORDER TO CURRITUCK BEACH LIGHT NC OUT  
TO 20 NM-  
1212 AM EDT SAT AUG 27 2011

...HURRICANE WARNING REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...  
PRECAUTIONARY/PREPAREDNESS ACTIONS...

BOAT OWNERS AND CAPTAINS OF SMALL CRAFT SHOULD RUSH TO COMPLETION  
THE SECURING OF THEIR CRAFT.

&&

...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS...  
THE CHANCE FOR HURRICANE CONDITIONS AT THIS TIME IS UP TO  
39 PERCENT. ALSO...THE CHANCE FOR TROPICAL STORM CONDITIONS AT  
THIS TIME IS UP TO 94 TO 97 PERCENT.

...WINDS AND SEAS...

AS HURRICANE IRENE APPROACHES...SUSTAINED TROPICAL STORM FORCE WINDS ARE EXPECTED TO BEGIN LATE THIS EVENING AND HURRICANE FORCE WINDS LATE SATURDAY AFTERNOON. HURRICANE FORCE WINDS ARE FORECAST TO LAST FOR MANY HOURS. MAXIMUM WINDS ARE FORECAST TO BE IN THE 50 TO 70 KNOTS RANGE WITH GUSTS TO 80 KNOTS. WAVES 15 TO 20 FEET NEAR THE COAST AND UPWARDS OF 30 FEET OFFSHORE.

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ANZ630>632-634-280415-

/O.CON.KAKQ.HU.W.1009.000000T0000Z-000000T0000Z/

CHESAPEAKE BAY FROM SMITH POINT TO WINDMILL POINT VA-

CHESAPEAKE BAY FROM WINDMILL POINT TO NEW POINT COMFORT VA-

CHESAPEAKE BAY FROM NEW POINT COMFORT TO LITTLE CREEK VA-

CHESAPEAKE BAY FROM LITTLE CREEK TO CAPE HENRY VA...INCLUDING THE CHESAPEAKE BAY BRIDGE TUNNEL-

1212 AM EDT SAT AUG 27 2011

...HURRICANE WARNING REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...

PRECAUTIONARY/PREPAREDNESS ACTIONS...

BOAT OWNERS AND CAPTAINS OF SMALL CRAFT SHOULD RUSH TO COMPLETION THE SECURING OF THEIR CRAFT.

&&

...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS...

THE CHANCE FOR HURRICANE CONDITIONS AT THIS TIME IS UP TO 19 PERCENT. ALSO...THE CHANCE FOR TROPICAL STORM CONDITIONS AT THIS TIME IS UP TO 90 PERCENT.

...WINDS AND SEAS...

AS HURRICANE IRENE APPROACHES...SUSTAINED TROPICAL STORM FORCE WINDS ARE EXPECTED TO BEGIN EARLY SATURDAY MORNING AND HURRICANE FORCE WINDS EARLY SATURDAY EVENING. HURRICANE FORCE WINDS ARE FORECAST TO LAST FOR MANY HOURS. MAXIMUM WINDS ARE FORECAST TO BE IN THE 50 TO 70 KNOTS RANGE WITH GUSTS TO 80 KNOTS. WAVES OF 6 TO 9 FEET ARE POSSIBLE WITH HIGHER WAVES NEAR THE MOUTH OF THE BAY.

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FLUVANNA-LOUISA-PRINCE EDWARD-CUMBERLAND-GOOCHLAND-MECKLENBURG-

LUNENBURG-NOTTOWAY-AMELIA-POWHATAN-

1212 AM EDT SAT AUG 27 2011

...HURRICANE IRENE TO IMPACT THE MID ATLANTIC REGION BRINGING PERIODS OF HEAVY RAIN...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...

PRECAUTIONARY/PREPAREDNESS ACTIONS...

TAKE ADVANTAGE OF THIS OPPORTUNITY TO REVIEW YOUR HURRICANE

DISASTER PLAN. IF YOU DO NOT HAVE A PLAN...MAKE ONE. IF YOU NEED ASSISTANCE WITH YOUR PLAN...CONTACT THE NATIONAL WEATHER SERVICE...LOCAL EMERGENCY MANAGEMENT...OR AMERICAN RED CROSS.

STORE ADEQUATE FOOD AND DRINK SUPPLIES FOR EACH MEMBER OF THE FAMILY FOR AT LEAST THREE TO FIVE DAYS. REPLACE BATTERIES IN FLASHLIGHTS AND PORTABLE RADIOS. FIX LOOSE AND CLOGGED RAIN GUTTERS AND DOWNSPOUTS. TRIM OVERHANGING TREES AND SHRUBBERY. ALSO...ACQUIRE PLYWOOD OR OTHER MATERIALS TO PROTECT YOUR HOME OR BUSINESS. REVIEW YOUR INSURANCE POLICY...UPDATING IT IF NECESSARY.

&&

...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS...  
AS CURRENTLY ASSESSED...THE ONSET OF EITHER TROPICAL STORM OR HURRICANE CONDITIONS IS UNLIKELY TO OCCUR.

...INLAND FLOODING...

SOME HEAVY RAIN MAY DEVELOP AT TIMES AS IRENE PASSES. THIS MAY PRODUCE 3 TO 5 INCHES OF RAIN IN ISOLATED AREA. THIS COULD CAUSE PONDING ON ROADS. SO NOT DRIVE THROUGH FLOODED ROADS.

...WINDS...

TROPICAL CYCLONE WATCHES OR WARNINGS ARE CURRENTLY NOT IN EFFECT...NOR ARE THEY LIKELY UNDER PRESENT CIRCUMSTANCES.

THE LATEST FORECAST IS FOR MAXIMUM WINDS TO REMAIN BELOW TROPICAL STORM FORCE. AT THIS TIME...REMAIN CALM AND STAY INFORMED.

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Sent by - swindham - Sat Aug 27 00:23:33 EDT 2011

# **EXHIBIT**

**4**

## **NWS BULLETINS FOR HURRICANE IRENE RELEVANT TO CURRITUCK COUNTY, NORTH CAROLINA**

...

...HURRICANE WARNING REMAINS IN EFFECT...

...PRECAUTIONARY/PREPAREDNESS ACTIONS...  
PRECAUTIONARY/PREPAREDNESS ACTIONS...

FOR CURRITUCK COUNTY...A MANDATORY EVACUATION ORDER IS IN EFFECT.  
FOR PERQUIMANS COUNTY...A VOLUNTARY EVACUATION OF LOW LYING AREAS  
IS ONGOING. A RED CROSS SHELTER HAS OPENED AT THE PERQUIMANS  
MIDDLE SCHOOL...AT 312 WEST MAIN STREET IN WINFALL.  
FOR CAMDEN COUNTY...A MANDATORY EVACUATION IS IN EFFECT FOR ALL  
LOW LYING AREAS IS ONGOING. FOR BERTIE COUNTY...3 SHELTERS HAVE OPENED IN  
WINDSOR...KEILFORD AND COLERAIN.  
IF EVACUATING...LEAVE AS SOON AS POSSIBLE. GUARD AGAINST BEING  
STUCK OUT ON ROADWAYS WHEN DANGEROUS WINDS AND HEAVY RAINS ARRIVE.  
AGAIN...DO NOT STAY IN A MOBILE OR MANUFACTURED HOME.  
REMEMBER...PETS ARE NOT ALLOWED IN MOST OFFICIAL SHELTERS...SO  
CHECK AHEAD WITH YOUR INTENDED SHELTER.

IF STAYING IN A HOME...TURN THE REFRIGERATOR TO MAXIMUM COLD AND  
KEEP IT CLOSED. TURN OFF PROPANE TANKS AND UNPLUG SMALL  
APPLIANCES. FILL THE BATHTUB WITH WATER IN CASE THE TAP WATER  
BECOMES UNAVAILABLE AFTER THE STORM. THIS IS FOR CLEANING AND  
FLUSHING PURPOSES. DO NOT DRINK IT.

&&

...PROBABILITY OF TROPICAL STORM/HURRICANE CONDITIONS...  
THE CHANCE FOR HURRICANE CONDITIONS AT THIS TIME IS UP TO  
39 PERCENT. ALSO...THE CHANCE FOR TROPICAL STORM CONDITIONS AT  
THIS TIME IS UP TO 99 PERCENT.

...STORM SURGE AND STORM TIDE...  
AS HURRICANE IRENE APPROACHES THE COAST...THERE IS AN INCREASING  
CHANCE FOR COMBINED STORM SURGE AND ASTRONOMICAL TIDE WATERS UP  
TO 5 FEET ABOVE MEAN SEA LEVEL WITHIN AREAS CLOSER TO THE COAST...  
RESULTING IN WORST CASE FLOOD INUNDATION OF 3 TO 5 FEET ABOVE  
GROUND LEVEL SOMEWHERE WITHIN THE SURGE ZONE.

THE LOCATIONS MOST LIKELY TO REALIZE THE GREATEST FLOODING  
INCLUDE COROLLA. LOCATIONS ALONG THE ALBEMARLE SOUNDING CAN  
EXPECT 2 TO 4 FEET. HOWEVER LESSER VALUES WILL OCCUR UP THE  
RIVERS. THE MOST LIKELY PERIOD OF IMPACT WILL BE SATURDAY  
AFTERNOON AND SATURDAY NIGHT.

THERE IS AN ELEVATED THREAT TO LIFE AND PROPERTY FROM COASTAL  
FLOODING. THE CONCERN IS FOR THE CHANCE OF MODERATE TO HIGH  
COASTAL FLOODING TO OCCUR IN AREAS WITHIN THE SURGE ZONE...  
RESULTING IN DAMAGING AND LIFE THREATENING INUNDATION. IF  
REALIZED...PEOPLE WITHIN THE THREATENED AREAS WHO FAILED TO HEED  
OFFICIAL EVACUATION ORDERS WILL HAVE NEEDLESSLY PLACED THEIR  
LIVES IN DANGER. THIS IS ESPECIALLY TRUE FOR THOSE STAYING BEHIND  
IN VULNERABLE LOCATIONS SUCH AS HOMES AND BUSINESSES NEAR THE  
SHORE...AND ONE STORY DWELLINGS IN FLOOD PRONE AREAS. SEVERAL  
ROADS IN FLOOD PRONE AREAS WILL LIKELY BE CLOSED.

...INLAND FLOODING...

A FLOOD WATCH IS IN EFFECT FOR THE ENTIRE AREA. 8 TO 12 INCHES OF STORM TOTAL RAINFALL IS EXPECTED ACROSS THE AREA WITH THE HIGHEST AMOUNTS CLOSER TO THE COAST. LISTEN FOR POSSIBLE FLOOD WARNINGS FOR YOUR LOCATION...AND BE READY TO ACT IF FLOODING RAINS OCCUR.

...WINDS...

AS HURRICANE IRENE APPROACHES...SUSTAINED TROPICAL STORM FORCE WINDS ARE EXPECTED TO BEGIN TONIGHT AFTER MIDNIGHT. MAXIMUM WINDS ARE FORECAST TO BE IN THE 50 TO 70 MPH RANGE WITH GUSTS TO 80 MPH.

DAMAGING WINDS ARE EXPECTED. POORLY ANCHORED MOBILE HOMES MAY BE DESTROYED...ALONG WITH THOSE OF OLD OR POOR CONSTRUCTION. SOME WELL ANCHORED MOBILE HOMES WILL HAVE SUBSTANTIAL DAMAGE TO ROOFS...WALLS...AND WINDOWS...AND COULD BECOME UNINHABITABLE. SOME HOMES OF FRAME CONSTRUCTION WILL SUSTAIN PARTIAL WALL AND ROOF FAILURE...AND POSSIBLY BLOWN OUT WINDOWS. LOOSE OUTDOOR ITEMS WILL BECOME PROJECTILES...CAUSING ADDITIONAL DAMAGE AND POSSIBLE INJURY. MANY AREAS WILL EXPERIENCE POWER OUTAGES WITH SOME DOWNED POWER POLES. NUMEROUS LARGE BRANCHES OF HEALTHY TREES WILL SNAP. SOME TREES WILL BE UPROOTED...ESPECIALLY WHERE THE GROUND IS SATURATED.

...COASTAL HAZARDS...

THERE WILL BE A HIGH RISK OF RIP CURRENTS ALONG AREA BEACHES TODAY AND SATURDAY. LARGE BREAKING WAVES...AND ROUGH SURF WILL ALSO BE A THREAT. DUE TO RIP CURRENTS AND VERY ROUGH SURF...BEACH GOERS ARE ENCOURAGED TO STAY OUT OF THE WATER.

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# **EXHIBIT**

**5**

## **SCREENSHOTS OF LOCALIZED ALERTS FOR PORTIONS OF MORGAN COUNTY, ALABAMA**

MT WASHINGTON, NH

TOMORROW

Wind 10 mph

-24°

FOG

10 miles

Fog/Windy

carries

WIND:

ENE @ 11 mph

CHANCE OF PRECIP:

30%

UV INDEX:

2

CHICAGO, IL

LOS ANGELES

Beverly Hills

Santa Monica

El Segundo

6:03 | 57°

The Weather Channel

55

55

57

weather.com

FLASH FLOOD WARNING

\* FLASH FLOOD WARNING FOR... NORTHWESTERN MORGAN



GFC GLOBAL FORECAST CENTER

# COLD MIDWEST

TODAY

-1°  
M'T'L FALLS

9°

MARQUETTE

11°

MINNEAPOLIS

17°

MADISON

12°

TRAVERSE CITY

24°

CHICAGO

21°

DETROIT

COMING UP COUNTDOWN: TOP 5 BAD WEATHER AIRPORTS

LOS ANGELES

Beverly Hills

66

Sania Monica

65

6:01 | 57°

El Segundo

63

The Weather Channel

weather.com

FLASH FLOOD WARNING

A \* FLASH FLOOD WARNING FOR... EASTERN MORGAN COUNTY

# —SILENT—

64

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weather.com

# FLASH FLOOD WARNING FOR... SOUTHERN MORGAN COUN

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